



2012 DIGITAL CITIES SURVEY

The Center for Digital Government (Center), and the *Digital Communities* (DC) program have launched the tenth anniversary national Digital Cities Survey!

In 2012, the survey focuses on outcomes - the results achieved through the use of technology. What was good practice has become a matter of survival in the wake of the fiscal crisis.

Top-ranked cities will receive the Digital Cities Survey award and will be honored at a reception during the National League of Cities annual conference. Additionally, winners will be featured on govtech.com, in Digital Communities articles and the Center's best practices and thought leadership publications.

The Center for Digital Government is a national research and advisory institute on information technology policies and best practices in state and local government. The Center is a division of e.Republic, a national publishing, event and research company focused on smart media for public sector innovation..

The Center thanks AT&T, McAfee, ShoreTel and Sprint for underwriting the 2012 Digital Cities Survey and for supporting city governments in their efforts to better serve their constituents.

The deadline for submissions is Tuesday, September 25, 2012.

2012 DIGITAL CITIES SURVEY

BACKGROUND INFORMATION AND RESOURCES FOR COMPLETING SURVEY

Recognition

All U.S. city governments are invited to participate in this survey. (In 2012, consolidated city/county governments and cities will be invited to participate in the Digital Cities Survey, which will be conducted during summer 2012).

City surveys are classified by population and rankings established within each group as follows:

- 30,000 – 74,999
- 75,000 - 124,999
- 125,000 - 249,999, and
- 250,000 or more

Survey and all supporting documents

This document includes the survey questions and all Appendices - Instructions for the online entry form, Scoring Criteria and the Glossary. Use this Word doc to compose responses and for a backup copy (it cannot be uploaded into the survey form).

Digital Cities Survey Questions:

The survey includes questions about outcomes/results in each of the following areas:

- Question 1. Adaptive Leadership in Information and Communications Technology (ICT) /The Big Picture
- Question 2. Computing
- Question 3. Network
- Question 4. Applications
- Question 5. Data and Cyber Security
- Question 6. Governance, Project Management and Funding
- Question 7. Energy Management
- Question 8. Business Continuity and Disaster Recovery
- Question 9. Performance Benchmark Reporting
- Question 10. Citizen Engagement: Open Government, Citizen Online Services, Mobile Services and Social Media
- Question 11. Innovation
- Question 12. Jurisdictional Differentiators

Scoring and Criteria: (See Appendix B)

- Responses to survey questions will be evaluated and scored except where otherwise noted. Please see Appendix B for criteria, points, and scoring methodology.
- For those who responded in 2011, please note the following changes: Questions 7, 8 and 9 are new. Specific questions from the 2011 CIO Poll have been greatly streamlined and incorporated into the 12 questions/matrices and 5 data-collection only questions.

Sharing Lessons Learned/ Best and Emerging Practices

- We ask these questions to learn, and we learn so we can give advice and contribute to informed collaboration among cities and the identification of best and emerging practices.
- The Center and the DC program recognize and appreciate the commitment of time and expertise needed to complete the survey.
- A broad range of best practices from survey responses will be shared with participants and provide examples of excellence for articles, reports, webinars, etc.

Digital Cities Survey

- Adaptive Leadership
- Outcomes
- Results

The
Survey



Adaptive Leadership and Innovation in Information and Communications Technology (ICT)

A Word of context about these Questions

Being a digital city is about bringing value quickly and consistently; it is also about adaptive CIO leadership, collaboration across the ICT community and creating trust among public officials – the city that does these things well is the “Digital City”.

Since 2001, the Digital Cities Survey has measured and prodded in this direction. The ‘great recession’ may be over, at least technically, but the unprecedented economic changes are still working their way through government, with significant effects on both budgets and service delivery. A “Digital City” recognizes the strategic transformational value of ICT and in difficult times focuses on leveraging ICT investments to improve services and efficiencies across all aspects of government.

ICT agencies that can demonstrate this kind of value-added service may find that the demand to “do more with less” may be somewhat alleviated when they can provide substantial value-added

services that allow the client agencies to become more efficient while maintaining or improving their level of service. ICT investments, when properly managed, can have this effect, and thus are critical in these difficult financial times.

Center for Digital Government's 2012 Digital Cities Survey

Registrant/Respondent (required):

First Name: Carolyn
 Last Name: Hogg
 Title/Role: Chief Information Officer
 Agency: City of Fresno
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 City/Town: Fresno
 State: CA
 ZIP Code: 93721

Alternative city contact if the registrant is not available:

First Name: Eddie
 Last Name: Hughes
 Title/Role: Information Services Manager
 Agency: City of Fresno
 Email: Eddie.Hughes@fresno.gov
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By submitting email addresses you will be sent relevant information regarding the Center for Digital Government's Digital Cities Survey and Digital Communities Program.

Select a Population Classification (required):

- ☐ 1) 30,000 - 74,999
- ☐ 2) 75,000 - 124,999
- ☐ 3) 125,000 - 249,999
- ☒ 4) 250,000 or more

What is the city's official (latest U.S. Census) population? 505,009

Trending Questions--For trending purposes only, please answer questions A, B and C below (responses are not scored). If any of these created a benefit or improved outcome, we invite you to discuss the benefits and improvements in the scored narrative questions that follow.

A. What measures has the city taken to deal with the economic downturn? Select all that apply:

- ☒ Reductions in staffing and operating hours
- ☒ Cuts in public service delivery
- ☒ Pursuance of funding streams (fees, grants, federal stimulus funding) to lessen dependence on general fund
- ☒ Agency consolidation, mergers and elimination
- ☒ IT consolidation (data centers, servers, applications and staff)
- ☒ Shared services (cross-agency and/or cross-jurisdictional joint service delivery)
- ☒ Increased reliance on third parties (private, commercial and not-for-profit)
- ☒ **Other:** Collaboration with other Public Agencies ____

B. How ready is the city to deal with the following IT challenges?	Not a Priority	Ready in Five Years	Ready in Two Years	Ready Now/ Measures in Place
B1. Keeping up with use of mobile devices for government business	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>
B2. Integrating mobile computing with smart phones and tablets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>
B3. Policies on BYOD (Bring Your Own Device)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>
B4. Social media technology and management; effects of the "collaboration Cloud"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>
B5. Telework and issues such as code changes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>
B6. Explosion of data; open data; and the crumbling data silo	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>
B7. Data safety as well as usability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>
B8. Cloud vendor management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>
B9. Consolidating services across agencies	<input type="radio"/>	<input type="radio"/>		<input checked="" type="checkbox"/>
B10. Other _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

C. Please list in priority order the following technologies and initiatives which are likely to have an increased focus in the next year. Click and drag to the top to show priority order.

1	Broadband and Connectivity	Working on regional efforts.
2	Shared Services	Working on regional efforts.
3	Cloud Computing	
4	Other: GIS Self Service	
5	Mobile Applications	Initial Framework Complete.
6	Portal/ E-government	
7	Data Center Consolidation	Local framework and provisions in place. Working on a regional effort.
8	Disaster Recovery/Continuity of Operations	Currently adding to our offsite location.
9	Budget and Cost Control	Working within current economic crisis.
10	Social Media	We have provisions in place.
11	Governance	
12	Hire and Retain Competent IT Personnel	We have few open positions.
13	Digital Literacy/ Augmentation of staff skills	We lack staff, but are achieving satisfactory service levels.
14	Cyber Security	Security mechanisms are in place and reviewed regularly.
15	Virtualization: Server, Desktop/Client, Storage, Applications	The framework for this initiative is complete.
N/A	Health Care	The City does not have a health care component.

C1. Please include additional clarifying information for the top priorities listed above if you wish:

1. Adaptive Leadership and Innovation in Information and Communications Technology

Question 1 is all about how Information and Communication Technology (ICT) is aligned with the policy goals of the city administration.

Question 1 is the “Big Picture” and is focused on the city administration’s policy initiatives and specific goals, and the ICT actions taken to address the specific stated policy goals. It is designed to afford cities the freedom and flexibility to tell their story. However, the key is to demonstrate alignment between ICT strategy and the Administration’s priorities.

In developing responses, consider the following:

- Describe the immediate challenges that the city is facing.
- Stimulus funding and reporting, were the outcomes achieved?
- New imperatives for openness, transparency and accountability. Is the city measuring and reporting performance outcomes?
- Assuming that ICT is being asked to be more efficient, how is it accomplishing that goal; was a target set, is it measured, and was it achieved? How is ICT providing leadership to other departments/agencies in meeting their efficiency targets?
- Innovation--Is ICT leading innovation programs in the city?
- What improvements have been implemented to further collaboration across agencies and with other jurisdictions?

Please describe the major changes made in the last year, including the level of scope, collaboration, investment and the results that were achieved. Also where desired, describe major changes planned for the next year. While future plans may be important for context, scoring will be based on results and outcomes already achieved.

The response to Question 1 sets the stage for the responses to Questions 2 through 12. **(Note: scoring will be based on accomplishments, not future plans)**

Question # 1 must be answered with a written narrative by all cities (please see Appendix B for detailed criteria and scoring).

1. The Big Picture: What are the major policies that the mayor and city council/ governing body have established and how is ICT being asked to respond? *Specifically, list the policies of the administration (with a reference to a document or where this is publicly stated) and describe what the ICT leadership is doing to meet the demands of government programs as they change.*

(Responses will be limited to 3,150 characters per the online system, approximately 500 words.)

***Note:** All attachments can be viewed at <http://www.fresno.gov/digitalcities>

Mayor Ashley Swearengin's Strategic Direction for Public Safety includes the immediate and on-going objectives of providing interdepartmental/interagency emergency response coordination/support for Neighborhood Watch, reducing violent crime, gangs, drugs and property crime ([Attachment 1](#)). Two new non-traditional areas of technology recently implemented to support these initiatives involve carrying video and two-way radio traffic over Internet Protocol (IP) networks. The City of Fresno recently completed an interoperability project largely funded by a \$1,750,000 Assistance to Firefighters Grant (AFG) award ([Attachments 2 and 3](#)). This is the largest award granted to 2,700+ recipients nationwide. This project also supports the Mayor's Fiscally Prudent Operations with a simplified design using unified communications reducing operating costs and energy consumption. The AFG Project not only benefits the City of Fresno but also nearby cities and fire districts served by Fresno Fire Department. The AFG Project forged new relationships and strengthened existing ones with other cities and school districts. The project replaced and supplemented all fixed two way radio equipment for Fire and Police Departments with a new system using a private IP backbone running Real Time Protocol (RTP) and replacing traditional analog channel bank equipment moving from a hardware radio platform managed software features.

We also formed a network specialist team to build a multicast network to support video policing for Fresno Police Department ([Attachment 4](#)). Our team took over a failed project turning it around using wireless, microwave, and fiber technologies. The multicast network requires near real time response to control cameras, watch video, and record video. We have installed 140 cameras and helped mature the technology and platform on which it runs. We have demoed video policing over the past year to national/local agencies, including Nigeria, Egypt, India, France, New Zealand, City of Baghdad, Kuwait National Guard and Columbia Metropolitan Airport.

As our city strives to maintain core services, Community Based Organizations (CBOs) stepped up to assist the City maintaining critically needed social programs. Information Services (IS) staff supports parks' computer labs to ensure vital technology education can continue to be provided by the CBOs to many underprivileged residents. As a result, young people have the opportunity to develop computer skills as well as a safe environment to complete homework assignments.

We are working to bring mobile government to residents and improve efficiencies of city operations supporting our Mayor's strategic direction for effective, efficient and fiscally prudent operations. The Streets Division allows field staff to take physical asset inventories such as streetlights, using GPS mobile devices improving efficiencies of repairs (especially from copper wire thefts). Ten IS staff participated in the first Government Mobility Conference in Sacramento in February 2012.

Questions 2 through 12:

The response to Question 1 sets the stage for the responses to Questions 2 through 12. With the response to the Big Picture question as context, we want to understand how those priorities and

dynamics are playing themselves out in key areas of ICT policy, strategy, governance, infrastructure, operations and development.

In each of the eleven questions below (questions 2-12), first identify in the matrix/check off questions the status of the initiatives and services currently in place in that category, and in the narrative that follows, describe the major changes made in the last year. Most importantly describe the outcomes achieved. Where appropriate include references to published reports (Web links or other publicly available information). The narrative should be specific and provide support for the responses in the matrix.

By design there is not enough room to address every initiative/service in the matrix as part of the narrative. Please select what is most innovative, most successful, most significant - the best solutions for your city – and concisely tell us about them.

For cities in the population categories 1 and 2 (fewer than 125,000), the questions may be answered with bulleted sentences, with the exception of the first and last questions. **Question # 1 and Question #12 must be answered with a written narrative** by all responding cities (please see Appendix B for detailed criteria and scoring).

2. Computing

2. From an enterprise viewpoint, what is the status of the following computing initiatives and services?	A) Not in place	B) Reflected in ICT policy framework	C) At least one instance in place	D) Implemented in Multiple Agencies	E) Implemented at Enterprise Level	F) What year substantially completed (if C-E selected)
2.1. Consolidated IT Operations/Shared Services (please describe below)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	2011
2.2. Server Virtualization-- indicate percent (%) physical server reduction: 50%	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2011
2.3. Client Virtualization/Thin Clients	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	2011
2.4. Storage Virtualization	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	2012
2.5. Bring Your Own Device (BYOD) Support We allow BYOD for email purposes. This is implemented in our enterprise.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2010
2.6. Cloud Computing, Private or Hybrid We have a private cloud that includes multiple agencies (City of Clovis, County of Fresno, Public Safety, Schools) allowing the sharing of data and services.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	2003
2.7. Cloud Computing, Public Cloud	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	

						2011
2.8. Outsourcing (please describe below) We outsource our Utility Billing Software, we are not in need of other outsourcing, rather, we provide our expertise to other cities in the form of consulting.		○	<input checked="" type="checkbox"/>	○	○	2011
2.9. IT Infrastructure Library (ITIL)—Specify Modules Implemented We have implemented several ITIL Modules including Service Desk, Change Management, etc. We are currently reviewing and implementing others as they fit into our organization.	○	○	<input checked="" type="checkbox"/>	○	○	2010
2.10. Other (to receive credit, specify): Password Self Service	○	○	○	○	<input checked="" type="checkbox"/>	2012
2.11. Other (to receive credit, specify):	○	○	○	○	○	—
2.12. Other (to receive credit, specify):	○	○	○	○	○	—

For cities in the population categories 1 and 2 (fewer than 125,000), the questions may be answered with bulleted sentences, with the exception of the first and last questions. **Question # 1 and Question #12 must be answered with a written narrative** by all responding cities (please see Appendix B for detailed criteria and scoring).

By design there is not enough room to address every initiative/service in the matrix as part of the narrative. Please select what is most innovative, most successful, most significant - the best solutions for your city – and concisely tell us about them.

2A. Computing: Describe actions taken and results achieved including but not limited to consolidation, virtualization, co-location, shared services and provisioning mix (on premises, cloud, hybrid) best suited to the needs and policy priorities of the city. Specify examples showing support for the above identified initiatives and services.

(Responses will be limited to 2,250 characters per the online system, approximately 350 words.)

Over the past few years, we have been embarking on operational efficiencies as part of the Mayor's strategic direction for effective, efficient and fiscally prudent operations. Having over 200 servers, 3,000 users and 2,000+ devices, we evaluated many technologies including virtualization, cloud, clustering and consolidation. With budget shortfalls and needed staff efficiencies, we developed a solution including power management and application delivery which negated the need for desktop virtualization.

We have virtualized over 50% of our servers. Our server room efficiencies have been dramatically increased and properly secured, our administrators can remotely access servers and it is environmentally sound as we have implemented proper environmental controls (hot aisle containment) ensuring efficient operation. We also have a “hot site” location for disaster recovery which is constantly evolving.

We have a private cloud shared by multiple agencies (City of Clovis, County of Fresno, Public Safety, Schools) allowing the sharing of data and services (**Attachment 5**). Our utility billing and wireless internet service for our Convention Center use cloud services. Mobile computing was implemented years ago; however, as end user needs change, we have implemented governance for tablets and BYOD (Bring Your Own Device) for email purposes.

We outsource our utility billing software; however, we are not in need of other outsourcing but do provide our expertise to other cities in the form of consulting.

We updated governance as well as implemented best practices and adopted Information Technology Infrastructure Library (ITIL) and National Institute of Standards and Technology (NIST) standards and will continue to evaluate and implement where applicable. This updated governance includes end user awareness, social media tools and policies as well as provisions for security so we can stay current with global Cyber Crime issues.

We belong to MISAC (Municipal Information Systems Association of California) and MS-ISAC (Multi-State Information Sharing & Analysis Center. We collaborate with other agencies offering our expertise and resources as well as gaining a perspective of our peer cities subject matter.

3. Network

3. From an enterprise viewpoint, what is the status of the following network initiatives and services?	A) Not in place	B) Reflected in ICT policy framework	C) At least one instance in place	D) Implemented in Multiple Agencies	E) Implemented at Enterprise Level	F) What year substantially completed (if C-E selected)
3.1. Enterprise-wide network service (if multiple networks, please describe below) The City of Fresno not only has its own Enterprise-Wide network both wired and wireless to support its end users and the public, we also have a regional network that serves multiple agencies (see Attachment 5).	○	○	○		☑	2005
3.2. Unified Communications Brief definition - using an IP network to integrate various communication services, also see	○	○		☑	○	2012

the Glossary Appendix E						
3.3. Collaboration Tools (Audio/Web Conferencing, Instant Messaging, Internal Social Media Network, Data Sharing,) – please specify below The City has instant messaging, conference bridges, social media pages, twitter and shares GIS data with other agencies.	○	○	○	○	☑	2011
3.4. Voice over Internet Protocol (VoIP)	○	○	☑	○	○	2011
3.5. Video Services— please specify below Our video staff provides video for Council meetings, press conferences, review committees and other events upon request. Our Council Video is both streamed live on the City's web pages as well as broadcast on a local Government Channel.	○	○	○	○	☑	2010
3.6. Wireless Broadband Services	○	○	○	○	☑	2010
3.7. Other (to receive credit, specify): Radio over Internet Protocol (RoIP) – Multiple Agencies: City of Clovis, Fresno County, North Central Fire District, Fig Garden Fire District	○	○	○	☑	○	2012
3.8. Other (to receive credit, specify): _____	○	○	○	○	○	—
3.9. Other (to receive credit, specify): _____	○	○	○	○	○	—

For cities in the population categories 1 and 2 (fewer than 125,000), the questions may be answered with bulleted sentences, with the exception of the first and last questions. **Question # 1 and Question #12 must be answered with a written narrative** by all responding cities (please see Appendix B for detailed criteria and scoring).

By design there is not enough room to address every initiative/service in the matrix as part of the narrative. Please select what is most innovative, most successful, most significant - the best solutions for your city – and concisely tell us about them.

3A. Network: Describe actions taken and results achieved including but not limited to broadband and wireless initiatives. Specify examples showing support for the above-identified initiatives and services (question 3).

(Responses will be limited to 2,250 characters per the online system, approximately 350

words.)

We have a robust and secure enterprise-wide wired and wireless network offering voice, video and data and a regional network for data sharing that serves multiple agencies ([Attachment 5](#)). The City's enterprise network consists of 250+ servers, 3,000 end users and 26 locations within 113 square miles. We support the North Central Fire Protection District, public safety and wastewater facilities spanning 15 miles from the City's core infrastructure.

Our unified communications consist of voice and instant messaging with some video conferencing. We have instant messaging, conference bridges, social media pages, twitter and share GIS data with other agencies. We began moving to VOIP (Voice over Internet Protocol) last fiscal year and have upgraded our voicemail messaging system including unified messaging. We support tablets, smartphones, cellular devices and a private cellular wireless network for our Public Safety. Cellular devices are allowed to connect to the City's email system via a secure link. The public can access the Internet through a separate "free" network that includes security provisions. Our video staff provides video for Council meetings, press conferences, review committees and other events. Our Council Video is streamed live on the City's web pages as well as broadcast on a local Government Channel.

We have a 16 site voted mobile radio network throughout our 350 square mile area of coverage using a private multicast IP backbone or radio over IP (RoIP). The transport is a mixture of licensed microwave and fiber using a mixture of ATM, MPLS, and Ethernet. This network supports 8 Fire and 13 Police Department channels. The system uses real time protocol (RTP) and real time protocol control protocol (RTPC). Using IP reduces operating costs over the analog network it replaced by use of unified communications. The backbone network is much simpler in terms of hardware reducing energy needs by over 80%.

We are undertaking a regional initiative partnering with other agencies as part of the federal partnership SC2 (Strong Cities, Strong Communities) effort initiated by the White House. We are working with the SC2 team to develop and support bringing wireless broadband to unserved and underserved areas.

4. Applications

4. From an enterprise viewpoint, what is the status of the following application initiatives and services?	A) Not in place	B) Reflected in ICT policy framework	C) At least one instance in place	D) implemented in Multiple	E) Implemented at Enterprise	F) What year substantially completed (if C-E selected)
4.1. ERP-Budgeting/Accounting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	1999
4.2. ERP-Human Resources & Payroll	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	1999
4.3. ERP-Procurement/Admin/Asset Tracking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	1999
4.4. Business Intelligence/Advanced Analytics (specify) The City's Police Department through data analysis of crime reporting/statistics uses this information to predict future crime trends. This has been a successful form of Advanced Analytics.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	2006
4.5. Agile Development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2003
4.6. Mobile Apps	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	2012
4.7. Application Modernization (specify) Through customization and web page front ends, the City has implemented application modernization in a variety of applications. Significant efforts have been made in PeopleSoft Human Capital Management.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2009
4.8. Multi-Agency Development (specify) GIS data sharing between the City of Fresno, County of Fresno, and City of Clovis; Fresno Council of Government was added in 2012 GIS is implemented enterprise wide at the City of Fresno	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input checked="" type="checkbox"/>	2003
4.9. Other (to receive credit, specify): On-line web based GIS self service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2012
4.10. Other (to receive credit, specify): Raytheon Wide Area Interoperability System (WAIS) and WAIS dispatch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	2012
4.11. Other (to receive credit, specify):	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

For cities in the population categories 1 and 2 (fewer than 125,000), the questions may be answered with bulleted sentences, with the exception of the first and last questions. **Question # 1 and Question #12 must be answered with a written narrative** by all responding cities (please see Appendix B for detailed criteria and scoring).

By design there is not enough room to address every initiative/service in the matrix as part of the narrative. Please select what is most innovative, most successful, most significant - the best solutions for your city – and concisely tell us about them.

4A. Applications: Describe actions taken and results achieved including but not limited to any of the above (question 4) internal services (enterprise applications, business intelligence, and analytics). External citizen and business-facing online services should be discussed in question 10.

(Responses will be limited to 2,250 characters per the online system, approximately 350 words.)

The City recently added the Fresno Council of Governments (COG) to its Fresno regional e-government system. This system is focused on the sharing and collaboration of GIS data between the various agencies: City of Fresno, County of Fresno, City of Clovis, and now Fresno COG (**Attachments 9 and 10**)

The City has recently implemented an on-line web based GIS “tool box”. This new tool allows for end user GIS self-service. Users can now perform GIS/mapping tasks and data analysis on their own without involving GIS staff. This led to increased efficiencies and productivity, and frees up GIS staff for complex duties and development tasks. This tool has different functionality and features depending if City staff or the public use it. The link below is a public facing tool which has a similar look and feel as the one used internally: <http://gis4u.fresno.gov/viewer/>.

The City continues to enhance its Human Resource and payroll applications utilizing Agile Development methodologies. The application developers work closely with Human Resources staff to get the desired outcomes and improvements.

The AFG project brought us a Raytheon application called Wide Area Interoperability System (WAIS) and WAIS Dispatch. The application runs on laptop computers in the field allowing Fire and Police departments in the area to make interagency connections between radio channels and perform most of the functionality of a dispatch center directly from mobile command posts on the scene of an incident. This on scene capability gives field commanders a direct link to communications making communications quicker and more accurate. The WAIS Dispatch application also gives us the ability to set up radio dispatching in field locations such as a school or community center to support disaster operations using a laptop computer in a matter of minutes and have a high quality audio link with performance rivaling and in some ways exceeding that of the dispatch center. This ability is being made available to all Fire, Law Enforcement and Emergency Medical agencies in the 350 square mile area of Fresno and North Central Fire Departments and beyond.

5. Data and Cyber Security

5. From an enterprise viewpoint, what is the status of the following data management and cyber security initiatives and services?	A) Not in place	B) Reflected in ICT policy framework	C) At least one instance in place	D) Implemented in Multiple Agencies	E) Implemented at Enterprise Level	F) What year substantially completed (if C-F selected)
5.1. Published Cyber Security and Privacy Policies, Directives and Guidelines	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	2012
5.2. Cyber Security Employee Awareness Training Program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2012
5.3. Intrusion Prevention System	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2005
5.4. Data Encryption Policy/Enforcement	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	2012
5.5. Anti-Virus/End Point Protection	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2009
5.6. Security Server Patch Enforcement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2012
5.7. Public Key Infrastructure (PKI)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	2010
5.8. Data Classification/Cataloging	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	2012
5.9. SAAS approach for Data Sharing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	2011
5.10. "Big Data" Management (non-structured data)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	2012
5.11. Fraud Detection--Multi-Agency Data Sharing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2012
5.12. Identity/Access Management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2008
5.13. Single Sign-On	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2008
5.14. Other (to receive credit, specify): Security Scanning/Servers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2011
5.15. Other (to receive credit, specify): _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
5.16. Other (to receive credit, specify): _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

For cities in the population categories 1 and 2 (fewer than 125,000), the questions may be answered with bulleted sentences, with the exception of the first and last questions. **Question # 1 and Question #12 must be answered with a written narrative** by all responding cities (please see Appendix B for detailed criteria and scoring).

By design there is not enough room to address every initiative/service in the matrix as part of the narrative. Please select what is most innovative, most successful, most significant - the best solutions for your city – and concisely tell us about them.

5A. Data and Cyber Security: Describe actions taken and results achieved including measures to increase the data and security availability, accuracy, integrity and share-ability (through common data standards, architectures, protocols and practices). Specify examples showing support for the above-identified initiatives and services.

(Responses will be limited to 2,250 characters per the online system, approximately 350 words.)

Security and security awareness are a big concern for the City of Fresno. Over the past few years, the City has been reviewing and improving its infrastructure security. We have implemented many processes, procedures and policies to follow best practices as well as comply with PCI (Payment Card Industry) requirements.

Security awareness for end users has become an increasing priority for the City. This past year we have become a member of the Multi-State Information Sharing & Analysis Center, which focuses on cyber threat prevention. As part of this membership, we receive automated alerts and are invited to monthly meetings on the latest cyber threats and vulnerabilities. In addition, we receive monthly newsletters on cyber education written for the end user audience which we rebrand and make available to our users through a SharePoint site for home protection as well.

For PCI Compliance, we have tightened our security measures and restrictions creating incident response systems, periodic review of security equipment (firewalls, etc.), and have implemented policies, etc. Our security has been increased as we have created PCI zones, have our systems scanned monthly and have implemented two-form factor security. In addition, when appropriate, emails are sent out in the case of any threat that has been experienced or as a reminder.

We have in place firewalls, ACLS (Access Control Lists), Intrusion Detection systems, anti-malware/spyware/virus software and we scan both incoming and outgoing mail for spam. Our security solution (Trend Micro) is installed on servers, desktops, laptops, tablets and smartphones. We have a DMZ and issue certificates for both public facing as well as certain internal sites. We use IPsec (Internet Protocol Security) based VPN with AES 256 bit encryption and VPN users only have access to what they need. All equipment is patched on a timely basis including critical patches. In addition, administrators have elevated accounts as an additional security measure and complex passwords are used enterprise-wide for all accounts.

Attachments 6 and 7.

6. Governance, Management and Funding

6. From an enterprise viewpoint, what is the status of the following governance initiatives and services??	A) Not in place	B) Reflected in ICT policy framework	C) At least one instance in place	D) Implemented in Multiple Agencies	E) Implemented at Enterprise Level	F) What year substantially completed (if C-E selected)
6.1. Project Review Mechanism for initiating and overseeing IT investments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2009
6.2. IT Steering Committee with Executive Level Members	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2009
6.3. Project Management Office	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2006
6.4. Enterprise Architecture (EA) Model	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2011
6.5. Portfolio Management Model (specify): Servers are managed through virtualization to optimize usage managing hardware capabilities and optimizing replacement strategies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2009
6.6. IT Strategic Plan (current)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2012
6.7. Shared Services Model/Policy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2003
6.8. Training Program to educate around EA and Shared Services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2009
6.9. Other (to receive credit, specify): Key Support Person (KSP): Meetings with customers to obtain recommendations for service improvements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2011
6.10. Other (to receive credit, specify): Technology Groups: Monthly meeting with city-wide technology staff to discuss current issues and plans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2009
6.11. Other (to receive credit, specify): _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

For cities in the population categories 1 and 2 (fewer than 125,000), the questions may be answered with bulleted sentences, with the exception of the first and last questions. **Question # 1 and Question #12 must be answered with a written narrative** by all responding cities (please see Appendix B for detailed criteria and scoring).

By design there is not enough room to address every initiative/service in the matrix as part of the narrative. Please select what is most innovative, most successful, most significant - the best solutions for your city – and concisely tell us about them.

6A. Governance, Management and Funding: For the above initiatives (question 6) and for ANY OTHER governance initiatives, provide detailed explanations and examples of what was implemented in the last year; including structures, management disciplines and funding approaches that deliver sustained value and ensure the continued viability of ICT operations in an era of fiscal constraints and at a time when infrastructure, applications and data are shared across previously separate entities and governance structures.

(Responses will be limited to 2,250 characters per the online system, approximately 350 words.)

AFG grant benefited multi-agencies: Fire/Police, North Central Fire Protection District, City of Clovis and Fresno County. The funding was instrumental meeting the federal mandate for narrow banded radio communication 12/31/12 realizing significant cost savings for infrastructure implementation, new public safety radio equipment, upgrades to real time internet protocol network and interoperability equipment.

By funding upfront costs of the narrow banded system, the City recognized savings for public safety. The grant benefited systems funded by other grants including Metropolitan Medical Response Systems, Public Safety Interoperable Communications and Urban Area Security Initiative. Due to the system's advanced technology, IS staff will continue supporting network and communications technology.

The executive team is working with public agencies including State of California, Fresno County, CSU Fresno, San Joaquin Valley Regional Broadband Consortium and many departments with the SC2 federal partnership team to bring wireless broadband to the rural area. With this technology, there is the potential to double agricultural crop production, and doubling revenue coming into Fresno's region. Rural Broadband will also support other interests as TeleHealth, Distance Learning and sharing Open Data regionally.

We worked with the Community Media Access Collaborative (CMAC) to complete their downtown studio. CMAC provides content for the City's Public/Education/Government (PEG) channels. Staff will continue future collaborative efforts with CMAC. We also assisted the City of Los Banos in design support for their migration to Microsoft Exchange.

We assisted the City's Public Utilities Department in achieving their first ever American Public Works Association (APWA) Accreditation. This Accreditation is given to organizations showing excellence in best practices in operations. Our information

systems, support services and security passed the APWA's strict criteria.

SC2 and the city are partnering with Microsoft's mobile technology boosting capabilities and efficiencies of Code Enforcement in concentrated poverty neighborhoods sharing data with multiple agencies as Housing Authority and School Districts.

For cities in the population categories 1 and 2 (fewer than 125,000), the questions may be answered with bulleted sentences, with the exception of the first and last questions. **Question # 1 and Question #12 must be answered with a written narrative** by all responding cities (please see Appendix B for detailed criteria and scoring).

7. Energy Management

7. To what degree are the IT strategies and practices aligned with the city's sustainability program or climate action plan?

				X
1	2	3	4	5
1-No program or plan	2-Developing a program or plan	3-Not aligned	4-Somewhat aligned	5-Fully aligned

7A. Energy Management: Describe actions taken and results achieved in terms of sustainability, energy conservation, and "green government"; including both activities within the ICT domain, as well as other innovative energy management programs within the government.

(Responses will be limited to 2,250 characters per the online system, approximately 350 words.)

While the City of Fresno does not have a published climate action plan, there are concerns about sustainability and power management. In recognition of the Mayor's Strategic Direction to improve inefficient and outdated operations and in alignment with the Development and Resource Management Department's goals for "Sustainable Fresno", we have implemented energy saving measures where appropriate and as budget allows.

<http://www.fresno.gov/Government/DepartmentDirectory/DARM/DevelopmentServices/StandardsGuidelines/Fresno+Green.htm>

Our server room has been reconfigured and we have implemented a hot-aisle containment solution. It is not unusual for Fresno to have temperatures into the low 100's for at least one third of the year or for the temperature to reach 110 and/or be above 100 degrees for a number of days. Since it is a hotter environment, we implemented a solution that could keep our servers at a desirable temperature while saving on power costs. With the implementation of the hot-aisle solution, we not only help keep servers at a proper

temperature but also save on energy costs and increased our ability to maintain servers longer during power outages. During a recent power outage, we were able to keep the majority of our servers operational and had to shut down only a few non-critical redundant servers.

Not only did we implement a hot-aisle solution for our servers, we also implemented power management for our desktops. Currently, most of our desktops will power off during non-working hours and power-on at a pre-set time. This has been another cost saving measure to help with power savings as well as help the City of Fresno be environmentally friendly.

The 247 receivers in our new AFG radio system use 20% of the energy of some alternatives. The system also has functionality in software that eliminates the need for much support equipment which also adds to the savings. On top of this we enjoy savings due to the reduced need for air conditioning since the 80% energy savings is also 80% less heat generated by the equipment that needs to be removed from the equipment rooms.

8. Business Continuity and Disaster Recovery

8. *What steps has the city taken for business continuity and disaster recovery to ensure systems and data continuity? (Select all that apply)*

- ☒ City disaster/emergency/safety crisis management plan is completed
- ☒ Mission-critical systems have been identified and business continuity/ contingency plans have been established for them, including essential services
- ☒ City personnel have been trained on the plan's technology systems' recovery aspects
- ☒ Emergency alerting and notification system is in place
- ☒ City's plan has been coordinated with local disaster response authorities including interoperability communications plan
- ☒ Back-up for technology systems and data is in place
- ☒ City authorities can securely access communications and data from a remote or mobile location in the event city facilities are affected by the emergency
- ☒ City's E 9-1-1 capability allows first responders to be dispatched to the exact location of the emergency
- ☐ None of the above

For cities in the population categories 1 and 2 (fewer than 125,000), the questions may be answered with bulleted sentences, with the exception of the first and last questions. **Question # 1 and Question #12 must be answered with a written narrative** by all responding cities (please see Appendix B for detailed criteria and scoring).

8A. Business Continuity and Disaster Recovery: Please elaborate on the above (question 8) selections and other results achieved for the city's business continuity and disaster recovery efforts.

(Responses will be limited to 2,250 characters per the online system, approximately 350 words.)

The City has a disaster recovery/business continuity plan which includes a remote hot site where our major applications are replicated. It is a live site and houses our secondary Internet connection (from a separate vendor) configured with BGP (Border Gateway Protocol) for load balancing and recovery. The site is improved each year as needs arise. The City has identified mission critical systems and applications necessary for essential services including a risk assessment; these lists are reviewed and updated on a regular basis. (Attachments 11 and 12).

As part of the Cities' Continuity of Operations Plan (COOP), we have an annual exercise that reviews the technology systems' recovery plan. The City also takes advantage of any minor outage (such as power outages) for mock disasters to evaluate and improve the plan.

The City has a Software as a Service (SaaS) solution for its critical Utility Billing, Land Management, and Permitting systems. As part of this off-site solution, the vendor does real-time data replication between the main site in Lake Mary Florida and Atlanta Georgia. This web based application also allows for a secure remote or mobile connection as needed or in the case of a disaster.

The new public safety radio and interoperability systems installed this year as part of the AFG grant has many survivability and disaster recovery features. The system has both battery and/or UPS backup at all sites and also generator power at 13 of 16 sites. The real time IP network connecting the sites and dispatch center uses ring and hot standby configurations to provide protection from equipment and power failures. Radio transmitter sites are diversified among seven sites so loss of one site does not affect all channels. Most fire channels also have switchable main and standby transmitters. Each transmitter normally has the ability to operate with the help of up to 15 receiver sites; however, each can function at a lesser capacity with fewer or even act autonomously if totally isolated. The new WAIS interoperability system can provide the functions of the radio dispatch consoles at remote locations if the radio dispatch center were lost.

9. Performance Benchmark Reporting

9. Has the city established a process for performance benchmark measurement and reporting? *Was an established benchmark and measurement process used to compare the cost structure of the earlier way of conducting business and a new model based on the improvements in the use of technology? (NOTE: this question applies to any responses to questions 2 through 12)*

- ☐ No
- ☐ Yes, but the results are not disclosed
- ☒ Yes and results are public (For credit, describe in question 9A below.)

For cities in the population categories 1 and 2 (fewer than 125,000), the questions may be answered with bulleted sentences, with the exception of the first and last questions. **Question # 1 and Question #12 must be answered with a written narrative** by all responding cities (please see Appendix B for detailed criteria and scoring).

9A. Performance Benchmark Reporting: Describe how the data and reports were used in decision-making. In addition, in order to get full credit for the response “Yes, and results are public” above (question 9) indicating public reporting, describe the specific programs and include an http link or other reference to the location of such disclosure.

(Responses will be limited to 2,250 characters per the online system, approximately 350 words.)

Mayor Ashley Swearengin’s Strategic Direction for Public Safety includes the immediate and on-going objectives of providing interdepartmental/interagency emergency response coordination and support for Neighborhood Watch and reducing violent crime, gangs, drugs and property crime (**Attachment 1**). The AFG grant was instrumental in providing funding assisting the city’s compliance to narrow banded federal mandate 12/31/12 as well as ensuring consistent radio service for Police and Fire Departments. A radio system is crucial for responding timely to emergency calls. Response times are tracked to assist with staffing, scheduling, identifying inefficiencies and strategically locating personnel. Police’s benchmark is 7 minutes (dispatch to doorstep) and Fire’s benchmark is 4 minutes (dispatch to arrival).

The Police Department publishes crime statistics and reports that document crime by policing district and type. The monthly report is published on the City of Fresno’s website

<http://www.fresno.gov/Government/DepartmentDirectory/Police/AboutFresnoPD/CrimeReportsandStatistics/Default.htm>

This data is also distributed daily throughout the department to help meet their goal of keeping the challenges before them in their constant vision so that they can be prepared to proactively project and intercept criminal activity within the City before it happens or to strategically address these challenges if they arise.

Internally, we measure satisfaction both in formal and informal measurements. Formal measurement is thru on-line customer satisfaction surveys sent citywide. As part of our Help Desk application, we send customer satisfaction surveys on completed requests. Based on feedback, we determine areas where we can improve and/or re-focus efforts. We also analyze our strengths and what makes them successful. Additionally, upgrades to desktop applications have improved documentation tracking recurring problems with specific customers or common organizational problems. The Customer Support Team utilizes this information along with effective communication with colleagues to get ahead of problems in an attempt to “Beat the Question” by solving issues before they cause service interruptions to our customers.

10: Citizen Engagement

Public disclosure, a hallmark of open government, was first codified at the state level a century ago. The origins of the modern sunshine laws in state and federal government date from the mid-1960s.¹ In the 1990s, the Internet rekindled the movement with a dual promise of digital government (information and transactions) and digital democracy (citizen participation and visibility on how decisions are made). In short order, it established the portal and online services as a permanent part of the service delivery landscape.

The practice of public disclosure of expenditures was made even more visible with the American Recovery and Reinvestment Act of 2009 when each state was required to publish, through a website, information about the funds they had received, and how those funds were being used. Perhaps more than any other practice, this placed an entirely new focus on open government reporting.

Most recently, transparency and a campaign to make available and mash up government-held data – coupled with a rise in social media and the wide-scale adoption of mobile computing – has again begun to reset the public's expectations about its access to and interactions with its government. Taken together, it signifies tremendous opportunity and responsibility for government in the stewardship of the data and other information it holds.

10. What is the status of the following citizen engagement methods?	A) Not in place	B) Reflected in ICT policy framework	C) At least one instance in place	D) implemented Agency by Agency	E) Implemented at Enterprise Level	F) What year substantially completed (if C-E selected)
10.1. Blogs/Micro-blogs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10.2. Social Networks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2009
10.3. Wikis, Collaboration, Knowledge Sharing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2005
10.4. Podcasts/ Webcasts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2009
10.5. Mobile-enabled Website	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2011
10.6. GeoIP – Google Analytics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2011
10.7. Integration with Call Center(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2009
10.8. Integration with One Stop Service Centers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2010
10.9. Photo Sharing, Video Sharing	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2010

¹ Florida's tradition of open government dates back over a century to the passage of the Public Records Act in 1909. Its 1967 Sunshine Law is better known. At the federal level, Congress passed the Freedom of Information Act (FDIA) in 1966.

10.10. User Satisfaction Surveys	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	2010
10.11. Live Help – One call center	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2005
10.12. Widgets / Mobile Applications – Twitter, FB, weather, highlights	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2010
10.13 Open Data (data.gov) - GIS	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	2008
10.14 Other (to receive credit, specify): ARRA - The City has implemented American Recovery and Reinvestment Act reporting, helping with the goal and initiative of transparent Government.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	2009
10.15 Other (to receive credit, specify): Google Transit- The City has implemented Google Transit to encourage and facilitate using public transportation, helping to become more environmentally friendly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	2010
10.16 Other (to receive credit, specify):	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

For cities in the population categories 1 and 2 (fewer than 125,000), the questions may be answered with bulleted sentences, with the exception of the first and last questions. **Question # 1 and Question #12 must be answered with a written narrative** by all responding cities (please see Appendix B for detailed criteria and scoring).

By design there is not enough room to address every initiative/service in the matrix as part of the narrative. Please select what is most innovative, most successful, most significant - the best solutions for your city – and concisely tell us about them.

10A. Citizen Engagement: Please describe the city's policy and approach (strategic and tactical) to citizen engagement through open government, online service delivery, mobile services and social media initiatives. Be specific describing precisely what improvements have been made, what information has been made public and in what form, and the effects of changes on internal operations. Provide specific links to this data on the city Web portal. Include the benchmarks and metrics used to measure results and the benefits the public has realized as a result of these offerings.

(Responses will be limited to 2,950 characters per the online system, approximately 450 words.)

The City seeks higher levels of citizen engagement through extensive offerings of on-line/web based services (**Attachment 8**). A recent addition is the self-service GIS ToolBox (<http://gis4u.fresno.gov/viewer/>). The ToolBox allows citizens to make GIS based queries getting on-line results that can be exported for data analysis and manipulation. It reduces citizens, developers, and investors need to make on-site visits to City Hall supporting the Mayor's initiative and strategic direction of being

environmentally and business friendly.

As part of the Mayor's Public Safety initiatives, we launched additional on-line citizen engagement web pages. These include Violators Of Innocent Children Eradicated Task Force (VOICE) which monitors and tracks sex offenders and Operation Reveal which provides information concerning arrests related to prostitution ([Attachment 8](#))

We recently completed an extensive makeover for easier, more intuitive navigation and added photo galleries. Our goal is to increase web traffic and improve the web experience.

Citizens can provide feedback in several ways. For our website users, we rely on the "Contact Us" feature. We have multiple areas where the public can contact us via e-mail or phone providing feedback. All e-mails/phone messages are recorded and a response provided. The Mayor conducts Town Hall meetings where citizens suggest changes to our website and services.

We participate in external efforts with a lead role in the San Joaquin Valley Regional Broadband Consortium consisting of multiple agencies and citizens concentrating on regional broadband connectivity. This group measures satisfaction by working together on a common goal expressing viewpoints openly bringing connectivity issues as a group to the attention of California's PUC. The group's efforts have been noticed by other agencies statewide who are replicating our successful collaboration. Contact with the Fresno County Office of Education has led to meetings with the City of Fresno comparing operations.

We use Google Analytics measuring benchmark results of various citizen engagement efforts. Google Analytics provides useful statistics that help in creating an e-gov strategy and direction.

For Data Collection Only:

10B. Thinking about IT systems and infrastructure initiatives what are the Top Three priorities for the coming year in Citizen Engagement: Open Government, Citizen Online Services, Mobile Services and Social Media?

- 10B - 1) **Mobile Services**
- 10B - 2) **Open Government**
- 10B - 3) **Citizen Online Services**

11. Innovation

11. Please tell us about the most innovative or greatest breakthrough ICT accomplishment. How has ICT been used to create a new support or service capability or accomplish something organizationally never before thought possible? How is success being measured or demonstrated? Provide examples.

(Responses will be limited to 2,250 characters per the online system, approximately 350 words.)

The Assistance to Firefighters Grant (AFG) project replacing our public safety radio systems and added WAIS interoperability system bring new flexibility to operations and also maintenance. Data from trace logs in some of the 247 separate receivers recently allowed us to quickly track down interference in hours that might have normally taken months which could compromise public safety staff. WAIS equipped laptop computers allow interagency radio channel patches and radio dispatch ability from the field for emergency events or disaster situations. These abilities were not possible to this degree before.

Another example of real time IP applications installed and maintained by the City is our Video Policing Network. In 2008, we installed the first Video Policing cameras using an IP network to transport all video in real time. Round trip delay in the network is typically less than 10 milliseconds. The network grows each year with 6 new cameras installed in 2012 and 25 more funded and in queue. The system uses a combination of unlicensed wireless, licensed microwave, and fiber optic cable to transport video and control signals from and to the cameras. Today we have 136 Pelco Endura cameras mounted mostly on traffic signal poles around the City and four real time monitoring stations. The video is also recorded for a minimum of one week. The cameras have pan tilt zoom (ptz) ability and deliver 640 by 480 pixels resolution at 30 frames per second. The Police Department has credited the video from the cameras in helping to solve murders, robberies, kidnappings, assaults, graffiti tagging, traffic accidents, and other crimes. Some of these crimes were detected by the cameras in real time and officers were dispatched to the scene while the suspects were still present. Our use of wireless transport for the real time video and ptz control at distances up to 3 miles as we do is rare. See our supporting web page documents for more information on our video policing efforts.

Question #12 must be answered with a written narrative by all responding cities (please see Appendix B for detailed criteria and scoring).

12. Jurisdictional Differentiator

12. What critical factors: for example political, organizational, community, leadership or others have most contributed to overall ICT success? What are you most proud of and what makes your city unique in its approach to using ICT to support and improve the delivery of public service?

Examples may include things like collaboration and leadership provided in the broader IT community; historical, technical or organizational barriers overcome; development of public/private partnerships or anything else you would like to submit for consideration.

(Responses will be limited to 2,250 characters per the online system, approximately 350 words.)

In September 2012, Carolyn Hogg, CIO, was recognized by the White House as one of 13 "Champions of Change". These are individuals who have committed themselves to creating a more open and innovative government through entrepreneurship. Ms. Hogg was recognized for her efforts in partnering with agencies outside of city hall to maximize public funds. Ms. Hogg and her team of partners such as the San Joaquin Valley Regional Broadband Consortium, Office of Community and Economic Development at CSU Fresno, the USDA, and the Strong Cities/Strong Communities (SC2) Federal team are working together to bring wireless broadband to the rural area which will be used for smarter farming, distance learning, tele-health, and sharing of open data and common applications used among all municipalities throughout the region to maximize public funds. These efforts were also detailed in the August 2012 edition of Government Technology magazine.

Ms. Hogg and other department executive staff are also partnering with the SC2 Community Solutions Team to help the City achieve Mayor Swearengin's economic and community revitalization vision as outlined in her Strategic Direction for the City of Fresno ([Attachment 1](#)).

The Assistance to Firefighters Grant required the collaboration of departments within the City's organization structure as well as other agencies including the County of Fresno and the City of Clovis. Through this collaboration, a federal deadline for narrow banding was met as well as improved interoperability. The new technology will enhance multi-agency communication capabilities which will improve public safety. The Information Services Department (ISD) was proud to take a leading role in this project, stepping out of the traditional roles of technology services. By providing network, radio and project leading expertise, the project stayed on schedule and within budget.

For cities in the population categories 1 and 2 (fewer than 125,000), the questions may be answered with bulleted sentences, with the exception of the first and last questions. **Question # 1 and Question #12 must be answered with a written narrative** by all responding cities (please see Appendix B for detailed criteria and scoring).

ICT PRIORITIES

For Data Collection Only

Thinking about IT systems and infrastructure initiatives, what are the Top Three priorities for the coming year in the following four areas?

PA. Finance, Administration, Procurement and Human Resources Management Priorities

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- 1) Human Resources – Third Party Support
- 2) Procurement – Federal RFP-EZ Presidential Innovation Fellow’s Program model
- 3) Finance

PB. Public Safety, Emergency Management, Criminal Justice and Corrections Priorities

- 1) Public Safety – Video Policing
- 2) Emergency Management – Interoperability Project
- 3) Criminal Justice – sharing like data between Police and Courts

PC. Health, Social and Human Services Priorities

- 1) Social – Support of Parks Computer Labs
- 2) Health – Regional Broadband Project Supporting Tele-Health
- 3) Human Services – Assist With Homeless Programs

PD. Transportation and Motor Vehicles Priorities

- 1) Transportation – Handi-Ride, Rapid Bus Transit Project
- 2) Motor Vehicles – Fleet Anywhere system

Comments and Context about the Responses

Is there anything else we should know about your responses?

The City of Fresno was a recipient of MISAC's Excellence in Information Technology Practices award in 2010 and 2011. Attachment 13 is a copy of our application for the 2012 award.

As noted in Question #1, The Digital Cities application and all attachments can be viewed at <http://www.fresno.gov/digitalcities>.

Contact: Who may we contact if we have questions about responses to any of the above questions?

Name	Carolyn T. Hogg	Department/Agency	City of Fresno/
Title	Chief Information Officer		Information Services Department
E-mail	Carolyn.Hogg@fresno.gov	Phone No.	559.621.7101

THANK YOU FOR YOUR PARTICIPATION IN THE DIGITAL CITIES SURVEY

Please contact Janet Grenslitt, Surveys and Awards Director for questions regarding the survey at jgrenslitt@centerdigitalgov.com or 916-932-1363



Appendix A - Results Approach

Many jurisdictions have made deep cuts across the board, or eliminated entire functions, or both, while seeking new means of support and collaboration. This is a time when relevance and adaptability of government (and, by extension, the public sector information technology community) is being subjected to a very real world test – one that is being conducted in full public view, every day and with every encounter between citizens and their government. The urgent question is around how well, how nimble, how agile government is at adapting to the current environment with the future in sight – which is what a Digital City would do.

Results and outcomes are at the heart of the many performance measurement and management programs used by public agencies. What was good practice has become a matter of survival in the wake of the fiscal crisis.

Public officials have been clear about what they see as the new central question behind the surveys: what have you done with the hand that you have been dealt? The question captures both (a) what they are working on every day, and (b) what they would like to learn about their peers across the country.

Appendix B – Criteria and Scoring

SCORING APPROACH

The Center for Digital Government generally believes that a highly coordinated and consistent or “enterprise” approach to the planning, acquisition, implementation and management of information and communication technology returns the best results. However, we also realize that in some cases the political and or operational reality of city structure makes this difficult or even impossible in some functional or programmatic areas. Therefore, we have implemented evaluation and scoring criteria that encourage and reward an enterprise approach while still leaving room to recognize and not penalize those cities that operate, by necessity, in a more decentralized fashion.

For cities in the population categories 1 and 2 (fewer than 125,000), the questions may be answered with bulleted sentences, with the exception of the first and last questions. **Question # 1 and Question #12 must be answered with a written narrative** by all responding cities.

For Cities in the population categories 3 and 4 (125,000 or more):

Maximum credit will be given to those cities able to demonstrate that a purposeful and well-considered strategy, appropriate to their jurisdiction, is in place. Demonstration consists of responding in the narratives with examples, brief explanations and links.

For all cities:

To receive maximum credit cities are encouraged to connect the answers they give in the question matrices/selection lists with links to specific examples or supporting documentation and/or by providing **brief** clarifying explanations in the text boxes that follow. It is a way to essentially “show your work” and will be used by judges to verify and validate matrix selections. Questions without matrices will be evaluated on the content of the written response. The following criteria will be used to evaluate all scored responses.

CRITERIA

- Strategy, approach, implementation or actions are shown to be consistent with and in support of City priorities and policies to improve operations and/or services
(Population categories 1 and 2: (65%)
(Population categories 3 and 4: 35%)
- A quantifiable and demonstrable return-on-investment, in hard dollar savings and or soft dollar benefits has been achieved
(Population categories 1 and 2: (10%)
(Population categories 3 and 4: (25%)
- Demonstrated and verifiable progress over the previous year; either through a new initiative or through incremental improvement of an existing program or effort
(Population categories 1 and 2: (5%)
(Population categories 3 and 4: (15%)
- Innovation or creativity of solutions or approaches (15%)
- Demonstration of effective collaboration including multi-jurisdictional and inter-departmental
(Population categories 1 and 2: (5%)
(Population categories 3 and 4: (10%)

SCORING

- Responses to survey questions will be evaluated and scored.
- Criteria weighting (relative percentages) vary between population categories because some narratives are optional for population categories 1 and 2. The larger population jurisdictions (categories 3 and 4) will see more proportional emphasis placed on the narrative portion of their responses when compared to their matrix selections.
- Criteria are not mutually exclusive (e.g. unique forms of collaboration may also be considered innovative)
- The survey responses will be scored by a team of evaluators and be the basis of assigning a rank for overall performance.
- Responses to the non-scored data collection questions contribute credit for completion points.

SCORED QUESTIONS

Each scored question is worth 100 points (11) other than question one which is worth up to 200 points

Scored Question Total = 1300

COMPLETION CREDIT:

Each of the five non-scored questions earn 20 points of completion credit (5 X 20=100).

Completion credit points total = 100

Total Available Points: 1400

Appendix C - Lessons Learned/ Best and Emerging Practices

The results of the survey will be the subject of reports, articles, conference sessions, Webinars and other media content.

Aggregated results will be shared with participating cities to encourage an ongoing dialogue among practitioners related to lessons learned and best (and emerging) practices.

Appendix D - Instructions for the Online System

- The survey link: You have opened your unique survey entry form. It is not necessary to complete the survey in one session. **As long as you are using the same computer and browser each time, you may open the link and enter data at additional times** until you click on the Submit button on the last page, or until your cookies are cleared. If you open the link from another computer, you will not see your saved data - it will be a new entry form.
- **The Center strongly recommends that you download the survey Word document linked on the survey form online to your PC** to allow you and your team to compose and save your responses as a back-up to the online submission. (You can print each page from the online form but it will only show a few lines of text responses.)
- The 2012 Digital Cities Survey Word document copy (including Appendices) is linked to every page of the online survey. (The Word document cannot be saved to the survey online; it should be downloaded and used as a backup copy of the online submission.) Responses must be submitted online.
- Back and Forward Arrows: Use the arrows at the bottom of each page to navigate through the online entry form. **DO NOT USE the browser Back button.** Each time you click on the arrows it will save your responses up to that page. In order to save responses on the same page you entered them, click on the forward ">>" arrows.
- Please write clear, concise and plain language statements, and spell out or expand acronyms and initials on first use. *All narrative text is converted into one continuous paragraph within the text box for each question's response*, so use a numbering system or bullets with double-spacing before each number or bullet, or all-capitals for each new subject; particularly for lengthy responses for increased readability. Tables, graphs, screen shots, etc. will not transfer into the online form, so if you wish to present them for judging, post them on your website and include that URL link in the online entry.
- **Do not clear your cookies until after submission** as that will sever the link and delete your responses. However contact us if this happens as we may be able to recover your data and send it to you to complete.
- **The online submission is the complete, official entry.** You must click on the Submit button on the last page after completing your responses, to submit your entry.

NOTE: Once you have submitted your entry you will need to contact Janet Grenslitt if it is necessary to edit your responses. Upon request a copy of your submission will be available after the survey and awards process is complete.

For assistance, contact Janet Grenslitt, Surveys and Awards Director at jgrenslitt@centerdigitalgov.com, or (916) 932-1363.

Appendix E - 2012 Digital Cities Survey Glossary – Working Definitions

Cloud Computing: Refers to computing in which services and storage are provided over the Internet. It is a type of computing based on sharing computing resources rather than having local servers or personal devices handle applications.

Typical cloud computing delivers common business applications online which are accessed from another Web service or software like a Web browser, while the software and data are stored on servers.

Most cloud computing infrastructure consists of reliable services delivered through data centers and built on servers. Clouds often appear as single points of access for multiple computing needs.

Hybrid Cloud: This means a mixture of both on-premises and cloud-computing services. A hybrid cloud environment consists of multiple internal and/or external providers. This includes Hybrid Web Hosting, where the hosting infrastructure is a mix between Cloud Hosting for the Web server, and Managed dedicated server for the database server.

A “private cloud” or “internal cloud” refers to offerings that emulate cloud computing on private networks. Thus delivering cloud computing services while keeping resources local.

GeoIP: GeoIP (geographic Internet Protocol address) is the identification of the real-world geographic location of an Internet-connected computer, mobile device, website visitor or other. GeoIP data can include information such as country, region, city, postal/zip code, latitude, longitude and time zone.

ICT – Information and Communications Technology: This term reflects the study of the technology used to handle information and aid communication. In addition to the subjects included in Information Technology (IT), ICT encompasses areas such as telephony, broadcast media and all types of audio and video processing and transmission.

ITIL: The Information Technology Infrastructure Library (ITIL) is a set of concepts and practices for Information Technology Services Management (ITSM), Information Technology (IT) development and IT operations.

ITIL gives detailed descriptions of a number of important IT practices and provides comprehensive checklists, tasks and procedures that any IT organization can tailor to its needs. ITIL is published in a series of books, each of which covers an IT management topic. The names *ITIL* and *IT Infrastructure Library* are registered trademarks of the United Kingdom's Office of Government Commerce (OGC).

Appendix E - 2012 Digital Cities Survey Glossary – Working Definitions -Continued-

Provisioning Mix: Provisioning– the process of preparing, equipping and delivering IT services– takes many forms. A provisioning mix may include a department providing it internally, a central enterprise IT-providing department, a collaboration with a sister department or other public entity, or any number of third party providers in the private or not-for-profit sectors.

Shared Services: Shared Services refers to the provision of a technology service by one part of an organization or group where that service had previously been found in more than one part of the organization or group. Thus the funding and resourcing of the service is shared and the providing department effectively becomes an internal service provider. The key is the idea of 'sharing' within an organization or group.

Short Message Service (SMS): A communication service component of the GSM mobile communication system that uses standardized communications protocols that allow the exchange of short text messages between mobile phone devices. The term SMS is used as a synonym for all types of short text messaging, as well as the user activity itself, in many parts of the world.

Stimulus funding: Any funds received from the American Recovery and Reinvestment Act (ARRA) or “Stimulus”. These are any supplemental appropriations from the federal government through the ARRA for job preservation and creation, infrastructure investment, energy efficiency and science, assistance to the unemployed, state and local government fiscal stabilization and other purposes.

Unified Communications: Unified communications (UC) is the integration of real-time communication services such as instant messaging, presence information, telephony, video conferencing, call control and speech recognition with non-real-time communication services such as unified messaging (integrated voicemail, e-mail, SMS and fax). UC is not a single product, but a set of products that provides a consistent unified user interface and user experience across multiple devices and media types.